

CLAIMS

1. An organic emulsion-breaking formulation, characterized in that it comprises:

- as the emulsion-breaking agent, at least one constituent selected from non-ionic amphiphilic compositions obtained by reacting at least one polymerized vegetable oil with at least one amino-alcohol, and alkyl esters of fatty acids derived from natural, vegetable or animal oils;
- optionally, at least one wetting agent selected from anionic surfactants;
- and optionally, at least one solvent;

the assembly being as a mixture in an organic base.

2. A formulation according to claim 1, characterized in that:

- said emulsion-breaking agent is present in a proportion of 0.5% to 100% by weight of pure surfactant; and
- said wetting agent is present in a proportion of up to 50% by weight of pure surfactant;
- said solvent is present in a proportion of up to 99.5% by weight;

the ensemble having a concentration of pure active matter of 0.01 to 50 g per 100 ml of said organic base.

3. A formulation according to claim 1 or claim 2, characterized in that said emulsion-breaking agent comprises at least one non-ionic amphiphilic composition obtained by reacting polymerized linseed oil with diethanolamine.

4. A formulation according to any one of claims 1 to 3, characterized in that said emulsion-breaking agent comprises at least a mixture of methyl esters of rapeseed oil.

5. A formulation according to any one of claims 1 to 4, characterized in that said wetting agent is a sodium dialkyl sulfosuccinate.
6. A formulation according to any one of claims 1 to 5, characterized in that said solvent is selected from petroleum cuts, alcohols and hydroalcoholic mixtures, alkyl esters of long chain carboxylic acids and compositions of alkyl esters of fatty acids derived from vegetable oils.
7. A formula according to any one of claims 1 to 6, characterized in that said solvent is a mixture of methyl esters of rapeseed oil.
8. A formula according to any one of claims 1 to 7, characterized in that said organic base is a mineral oil or an oil of vegetable origin.
9. A formulation according to claim 8, characterized in that said organic base is non-polluting.
10. A formulation according to claim 8 or claim 9, characterized in that said oil of vegetable origin is a mixture of methyl esters of rapeseed oil.
11. A formulation according to any one of claims 1 to 10, characterized in that, when the formulation is used to treat well bores drilled in oil-base mud, the organic base of said formulation is an oil identical to that of the mud.
12. A formulation according to any one of claims 1 to 11, characterized in that it further comprises 1% to 10% by weight with respect to the organic base of at least one viscosifying agent for the organic medium and a quantity, determined according to the specific density required for the fluid, of at least one weighting agent.

13. A formulation according to claim 12, characterized in that the viscosifying agent is selected from organosoluble acrylic resins that are cross-linked to a greater or lesser extent.
14. A formulation according to claim 12 or claim 13, characterized in that said
5 weighting agent is selected from calcium carbonates of different grain sizes.
15. A formulation according to any one of claims 12 to 14, characterized in that it further comprises up to 5%, preferably up to 2% with respect to the organic base, of at least one dispersing agent.
16. A formulation according to claim 15, characterized in that said dispersing agent is
10 selected from hydroxy-functionalized carboxylic acid esters the functional groups of which have affinities with the pigments used in paint formulations.
17. Use of an emulsion-breaking formulation in an organic base according to any one of claims 1 to 16, for the treatment of a well bore drilled in an oil-base mud.
18. The use of an emulsion-breaking formulation in an organic base according to any
15 one of claims 12 to 16 in any well phase that requires a fluid having the same density as the mud used to drill the well bore.